

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,202	03/15/2002	Eun Jeong Park	58049-00003	1462
7590 02/18/2005			EXAMINER	
Joseph Hyosu		FORD, VANESSA L		
Squire Sanders & Dempsey			*	
14th Floor			ART UNIT	PAPER NUMBER
801 South Figu	eroa Street	1645		
Los Angeles, CA 90017-5554			DATE MAILED: 02/18/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

C4 ·					
	Application No.	Applicant(s)			
	10/088,202	PARK ET AL.			
Office Action Summary	Examiner	Art Unit			
	Vanessa L. Ford	1645			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C.§ 133).			
Status					
1) Responsive to communication(s) filed on 15 M	<u>arch 2002</u> .				
	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1-20</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) <u>1-20</u> are subject to restriction and/or expressions.	vn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119					
a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		atent Application (PTO-152)			

Application/Control Number: 10/088,202

Art Unit: 1645

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Election/Restrictions

Group I Claims 1-2, 6, 14 and 18 are drawn to a detoxified protein.

Group II Claims 3-5, 7-9 and 15-17 and 19-20 are drawn to a DNA, vector and host cell.

Group III Claims 10 and 11 are drawn to a method of preparing a detoxified protein.

Group IV Claim 12 and 13 are drawn to a vaccine and mucosal adjuvant.

Application/Control Number: 10/088,202

Art Unit: 1645

2. The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The special technical feature of Group I is a detoxified protein. The special technical feature lacks novelty under PCT Article 33(2) as anticipated by Domenighini et al, (EP 0 620 850 B1 published March 3, 1999). Domeninghini et al teach detoxified proteins of cholera toxins or heat labile toxins produced by *E. coli* which have a substitution at amino acid 63 (see the Abstract), Group I is the main invention in this application and it lacks novelty, therefore the other claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept. Inasmuch as, the technical feature does not define a contribution over the art, it is not "special" within the meaning of PCT Rule 13.2. Consequently, Groups I-IV lack unity of invention.

Application/Control Number: 10/088,202

Art Unit: 1645

Conclusion

3. Any inquiry of the general nature or relating to the status of this general application should be directed to the Group receptionist whose telephone number is (703) 308–0196.

Papers relating to this application may be submitted to Technology Center 1600, Group 1640 by facsimile transmission. The faxing of such papers must conform with the notice published in the Office Gazette, 1096 OG 30 (November 15, 1989). Should applicant wish to FAX a response, the current FAX number for the Group 1600 is (703) 872-9306.

Any inquiry concerning this communication from the examiner should be directed to Vanessa L. Ford, whose telephone number is (571) 272-0857. The examiner can normally be reached on Monday – Friday from 9:00 AM to 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached at (571) 272-0864.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov./. Should you have questions on access to the Private PAIR system, contact the Electronic/Pusiness Center (EBC) at 866-217-9197 (toll-free).

Vanessa L. Ford Biotechnology Patent Examiner February 10, 2005

> MARK NAVARRO PRIMARY EXAMINER